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## BEEF PRODUCTION IN EUROPE:

## CURRENT SERIAL RECORDS

## STATUS AND POTENTIAL

### Foreword

This is a preliminary report on beef production and marketing in Western Europe prepared by a group of livestock and marketing specialists who were sent to Europe in early 1970 by the Foreign Agricultural Service of the U.S. Department of Agriculture. They visited seven countries--Italy, France, Netherlands, Belgium, Germany, United Kingdom, and Spain--during a period of 1 month.

The purpose of the survey was to determine: (1) the status of beef production in Europe, separate from dairy and veal enterprises, (2) the prospect for expanded beef production in Europe, and (3) how expanded beef production might affect the restructuring of the agriculture of the European Community and its external trade.

Members of the group were Gwynn Garnett, Agribusiness Consultant; Myron Carpenter, Director, Research and Development, Peavey Company, Minneapolis; and Richard Cannon of Foreign Agricultural Service. The U.S. Feed Grains Council and U.S. Agricultural Attachés in the countries visited contributed much to the survey.

### Introduction

A large expansion in beef production and consumption is possible in Western Europe. Contributing to this prospect are attractive feeding margins, rising personal incomes, a high-income elasticity of demand for beef, and the opportunity to reduce costs through vertical coordination and the application of efficient technology to production, slaughter, and marketing.

Beef production would create a demand for high nutrient roughages, such as corn silage, and thus offer a profitable alternative to milk or grain production for the small and inefficient farms of the area. This could get at the crux of the European Community's agricultural problem--the milk and grain surpluses that have been created by high support prices under the Common Agricultural Policy.

Because commercial beef production in Europe is relatively new, however, detailed and reliable information about it is not readily available. Efforts to develop business opportunities should be undertaken cautiously until more data become available, or until the situation for each location has been carefully surveyed.

#### Highlights by Country

Italy. Commercial beef production in the Po Valley of Italy is the most advanced of any known area in the European Community. Estimates of beef cattle currently on feed range up to 500,000 head. Most feeders visited reported attractive profits. "Confined feeding" is the rule, mostly in barns with slotted concrete floors. Generally bulls are fed. Stilbestrol is illegal. About 1.3 million calves were imported in 1969 from East Europe, Austria, Germany, France, and the low countries. Good beef animals--120-400-pound Charolais, Limousin, and Holstein-Friesian (a beefier type than U.S.) bull calves--sell for \$70-\$80 per hundred pounds. Heifers cost 10 percent less. For a number of reasons, the supply of calves is decreasing now that the Italians want to expand beef production. The demand is reported to be approaching 2,000,000 head annually.

Feeding systems vary. For the most part, 120 to 150-pound calves are brought in and backgrounded (prepared for the feedlot) to 400-500 pounds in one operation, based usually on high silage rations. There are more variations in the finishing rations; however, silage, high-moisture corn, other grains, and grain byproducts in varying proportions, supplemented with soybean cake, cover most of them.

So far, few supporting businesses, organizations, and services for beef enterprises are available. However, feed mills formulate supplements; precast concrete, slotted floor panels, and feed troughs are available; and environment-controlled prefab barns are available from a manufacturer in Milan.

Among the large and sophisticated feeders is a strong feeling that slaughter and marketing enterprises are inefficient and costly to feeders. Among established feeders and potential outside entrepreneurs is a desire to expand or start feeding and breeding operations and slaughtering and marketing operations.

France. Commercial beef production in France is characterized by the development of Charolais and Limousin breeds with high genetic capabilities for efficient beef production, an abundance of beef, and low prices for slaughter cattle. There are reportedly about 10 commercial feeding

operations but only one or two run over 1,000 head per year. Most are running 200 to 500 head. The policy of the French Government is to expand beef production, but a program to implement this policy has not jelled.

Pressures are developing for increasing the distribution of food through supermarket chains. This movement is impeded by a limited supply of uniform quality meat. But, increased beef production in France may well take place through the integration of production and slaughter with distribution.

A French experiment station has directed breeding research toward multiple births of calves. Techniques have been developed to increase calf crops from 90 to 130 or 140 percent. These services are now being made available to farmers through the extension service.

In the Massif Central, there are opportunities to establish cow/calf operations.

Low countries. Commercial beef production has not started, but feed prices and beef prices indicate that it may be profitable. Several feed mills expressed a strong interest and a willingness to participate in helping to get beef production going. Owners of a large supermarket chain plan a feeding operation with an annual throughput of 80,000 head per year in two 180-day feeding periods. The plans are "on ice" because of uncertainties about the supply of animals to feed. There are reports that the Union of South Africa is scheduled to ship 600 Holstein calves per week by air to Brussels for feeding on farms.

Germany. In Bavaria, 5,000 farms are reported to be feeding out from 30 to 200 heads each--a development of the last 5 years. Feeding beef appears profitable. Most feeding is done rather primitively--in converted dairy barns. No organized systems or patterns have emerged. Simmenthal, the principal breed, is a satisfactory beef animal for south Germany.

There is widespread interest among feeders and would-be feeders in expanding beef production. This interest is supported by government policy and institutions. In Bavaria, as in Italy and elsewhere, supporting businesses, organizations, and services are not yet available.

United Kingdom. The United Kingdom consumes about half as much beef per capita as the United States and imports about 25-30 percent of what it consumes. Beef production, on a commercial scale, is barely beginning. Calf prices are lower, feedstuffs are cheaper, and slaughter cattle prices, plus payments, are lower than on the continent. Profits from feeding beef appear attractive and, based on the information available, it is not clear why beef production has not expanded more rapidly.

One operation has developed a system that may well have wider application in some form. A feed mill is owned by a parent company which also owns slaughter and distribution facilities. The feed mill buys calves and produces complete pelleted feeds for each stage of growth. The mill

contracts with farmers to rear the calves. The feeders receive the equivalent of 4 cents per pound of gain, which covers all "non-feed" costs of gain for the owner of the calves. This technique might be adapted and used in Northern Europe to help small farmers shift from milk production to beef production.

Spain. Conditions are favorable for a large expansion in production of beef cattle in Spain. The climate is excellent. High nutrient roughages can be green chopped 9-11 months per year. Slaughter cattle prices are favorable. Spain imports nearly one-third of the beef it consumes. Spain has the opportunity to be the Texas of Europe. It has the potential to produce beef profitably for domestic consumption and to supply breeding animals and feeder calves with high genetic capabilities for the sophisticated feeding operations that are developing in Italy and Northern Europe.

#### Status, Potential, and Limitations

Meaningful target. Per capita consumption of beef (including beef offals) in the European Community was 52 pounds in 1967/68 compared to 110 pounds per year in the United States. If the Community could step up beef output by a third, about 6 million more animals per year would have to be finished. That increase would require an estimated 8.4 million more tons of concentrate plus roughage from over 2.0 million acres. It is reasonable to expect that much of that 2.0 million acres would be diverted from grain production if the EC chose to encourage such diversion.

The United States, which supplies about 40 percent (5,000,000 tons) of EC imports of feedgrains, could reasonably expect to meet part of the increased requirements. (See Appendix Table 1).

In addition to the expanded markets for feedgrains, soybeans, and soybean meal and the diversion of competing grain production, it is quite possible that feeder calves of U.S. origin could be fed profitably in Europe. (See Appendix Table 9).

A significant expansion in beef production could create opportunities in Europe for exports of both American farm and non-farm products and for services which support beef enterprises.

The principal factors that affect a rapid expansion of beef production follow.

Demand. Population growth and income are the most important factors affecting the demand for beef. Population in the EC totals 186,000,000 and is growing at 1 percent per year. Per capita disposable income has risen 8.7 percent per year since 1960 and is expected to increase at over 6 percent for at least several years.

Per capita disposable income in current prices for EC countries,  
1960 and 1968

Year	EC	Belgium	Luxem- bourg	France	West Germany	Nether- lands	Italy
	U.S. dols.	U.S. dols.	U.S. dols.	U.S. dols.	U.S. dols.	U.S. dols.	U.S. dols.
1960.....	754	941	1,044	902	837	685	504
1968.....	1,428	<u>1/</u> 1,593	<u>1/</u> 1,575	1,734	<u>1/</u> 1,475	1,327	1,071
Percent <u>2/</u>	8.3	6.8	5.3	8.5	6.6	8.6	8.7

1/ Estimates. 2/ Average annual percent increase.

Source: Organization for Economic Cooperation and Development, National Accounts, 1958-1967, and supplements 1969.

The EC consumes only about 40 percent as much beef per capita as the United States, and about one-sixth of that is imported. Italy is the largest EC beef importer. Imports of beef carcasses equivalent to U.S. Choice grade are subjected to import charges which are running at about 60 to 65 percent of the c.i.f. price. The beef imports of the EC are a reserve market for beef produced within the area.

A recent unpublished study 1/ by Donald M. Phillips, Jr., of USDA on demand elasticity for beef in Italy shows the following:

1. The price elasticity of demand for beef was found to be -.58; i.e., an increase in beef prices by 1 percent results in a .58 percent decrease in the amount of beef bought.
2. The income elasticity of demand for beef was found to be 1.24; i.e., a 1-percent increase in income results in a 1.24- percent increase in the amount of beef bought.

In round terms, European per capita income is only 50 percent as great as that of Americans, and Europeans pay up to 50 percent higher prices for beef.

Most beef in Europe comes from culled animals from dairy herds and from white (milk-fattened) veal. (See beef and veal supply-demand balance on the following page).

Detailed price series for slaughter cattle, dressed carcasses, and retail beef in comparable terms are not available from regularly reported market statistics. Quotations for some European markets are collected and published by Reuters News Agency in London. These prices are not reconcilable

1/ Structural Parameters of Italian Beef and Pork Consumption (1956-1967 data by Donald M. Phillips, Jr., ERS/FRAD, Europe and Soviet Union Branch).

Beef and veal supply-demand balance  
(In thousand metric tons)

Year	West	France	Italy	Nether-	Belgium-	EC
	Germany			lands	Luxem-	bourg
<u>1960</u>	:					
Production.....	912	1,400	441	231	199	3,183
Net imports.....	+125	-66	+199	-27	+6	+237
Consumption.....	1,037	1,334	640	204	205	3,420
Self supply....%	88	104	69	113	97	93
<u>1965</u>	:					
Production.....	959	1,541	453	244	184	3,381
Net imports.....	+286	-34	+341	-23	+36	+606
Consumption.....	1,245	1,507	794	221	220	3,987
Self supply....%	77	102	57	110	84	85
<u>1970</u>	:					
Production.....	1,234	1,810	510	306	234	4,094
Net imports.....	+166	+29	+492	-42	+15	+660
Consumption.....	1,400	1,839	1,002	-264	249	4,754
Self supply....%	88	98	51	116	94	86
<u>1975</u>	:					
Production.....	1,235	1,767	495	324	238	4,059
Net imports.....	+273	+319	+700	-25	+37	+1,304
Consumption.....	1,508	2,086	1,195	299	275	5,363
Self supply....%	82	85	41	108	87	76

Source: Table 6 - 11 "Aggregation of Future Demand and Supply for Agricultural Products in the European Economic Community, 1970-1975", Institut Fur Wirtschaftsforschung.

with prices observed in specific instances. Summary prices for slaughter calves and dressed veal are published monthly by the EC Commission. (See Appendix Table 3 for prices of recent months). Grain-finished "baby beef" is barely known and there are no market quotations for it. The best indicator at this time appears to be prices for white veal though market reports lump all calves together.

Traditionally, the only assurance European consumers have had of buying young, tender, quality beef was as white veal. An example of a direct price comparison of Italian "grain-fed, baby beef" with white veal is shown on the following page.

	<u>Live weight Dollars/cwt.</u>		
Bulls (about equal to U. S. Standard).....	40	-	42
Heifers (about equal to U. S. Standard).....	36	-	38
Baby beef 1,050 to 1,200 lbs. (Choice and Prime) ..	51	-	54
White veal, 300 to 360 lbs. (about equal to Choice)	57	-	59

Although these and other indications show that baby beef prices may be within 10 to 15 percent of white veal prices, much more work needs to be done to learn about market price behavior for baby beef as larger quantities become available and how prices may be influenced by market promotional efforts.

Slaughter and marketing margins. It is generally conceded by observers and officials that prices paid to producers for slaughter cattle would be higher if modern techniques were applied to slaughter. However, this is difficult to quantify. Most beef slaughter is done in old municipal abattoirs or by small butchers. Most of the better cuts of beef flow through small shops and no price or cost data are available on these. Cuts are quite different from those in the United States and lack uniformity. One indication of the relative slaughter margin is shown in the following tabulation.

Item	Unit	Chicago	Milan
	Choice 900-1100 lb.		All cattle
Slaughter animals.....	Dollars/cwt.	29.90	33.34
Dressed beef (700 to 800 lbs.).....	Dollars/cwt.	47.60	73.00
Dressed as percent of slaughter.....	Percent	160.00	220.00

Support prices. The EC maintains what is equivalent to a support price at just over \$40/cwt. for calves and over \$30 for all cattle. It has not been decided in which category baby beef might be included.

Feeder calves. A shortage of animals to feed is said to be the principal factor limiting beef production. The problem is rather complex and lies at the crux of the common agricultural policies of the EC. Milk prices are supported at a level high enough to give tolerable incomes to small milk producers. This stimulates production, creating great surpluses of milk. The surplus of non-fat dry milk powder is then sold at about four-fifths of the support equivalent for use as milk replacer for feeding veal calves to 300 to 360 pounds. Since uniform, high-quality baby beef is not available, this white veal commands a high premium over beef. Veal

producers outbid beef producers for feeder calves. Nearly 8 million calves are vealed. Vealed calves eat no grain, no oil cake, and no roughage. Thus the vealing of nearly 8 million calves has become a method to dispose of some of the surplus milk in a politically acceptable manner. But, at the same time, the vealing of these calves obstructs the production of beef. Modest changes in EC programs could result in using some of these calves to help solve the surplus milk problem (see conclusions).

EC: Cattle and calf slaughter

:	:	:	:	:	:	:	:	:	:	:	:
:	1960	:	1961	:	1962	:	1963	:	1964	:	1965
:		:		:		:		:		:	
:		:		:		:		:		:	
:	Mil.	:	Mil.	:	Mil.	:	Mil.	:	Mil.	:	Mil.
:	<u>head</u>	:	<u>head</u>	:	<u>head</u>	:	<u>head</u>	:	<u>head</u>	:	<u>head</u>
Cattle....	10.5	11.6	12.4	12.3	11.0	10.9	11.8	12.5	12.8		
Calves....	8.2	8.2	8.6	8.8	7.7	7.4	7.6	7.8	7.7		
Total...	18.7	19.8	21.0	21.1	18.7	18.3	19.4	20.3	20.5		

See Appendix Table 4 for cattle and calves slaughtered by country in EC.

Large numbers of the calves now being vealed are not likely to be available for beef production until private interests, the EC, and member governments modify policies to encourage beef production. So, for the foreseeable future, beef producers will either have to compete with vealers for calves or import them and start cow/calf operations later on.

The current estimate for the milk price support program is about 800 million dollars annually, amounting to nearly \$40 per milk cow per year. Redirection of some of this expenditure in a manner to encourage beef production holds great promise. (The cost to the EC for its farm price support program is shown in Appendix Table 5).

Prices for feeder calves are not reported as such. The prices reported by beef feeders and vealers on a spot basis vary so much and cover such a wide range of grades that they are difficult to evaluate. Because Italy is the largest EC importer of calves, prices in and into Italy for feeder calves are the best price indicators available. However, in Italy there are no market quotations. Modena, Italy, is reported to be the largest cattle market in Europe. Animals offered for sale are tied by halters to fences. Buyers then "negotiate" with sellers and reach a price during the course of a morning. The prices are kept confidential to avoid possible embarrassment to the parties involved. On one morning, presumed to be typical, calves grading about Standard to Good were said to have sold as follows:

<u>Calf weight</u> <u>Lbs.</u>	<u>Dollars</u> <u>per/cwt.</u>
90 - 110.....	59 - 69
100 - 154.....	52 - 55

"FINAM", a government agency to encourage economic development in southern Italy, is buying 175 to 220-pound calves from Bavaria at \$152 to \$160 per head, or roughly \$83 per/cwt.

The most efficient and sophisticated feeder visited in Italy, or in any other countries visited, bought the best cattle available--Charolais, Limousin, and crosses of the two. His recent purchases were as follows:

	<u>Price</u> <u>per head</u>	<u>Price</u> <u>per/cwt.</u>
Limousin 530 pounds.....	\$ 320.00	\$ 60.00
Charolais 530 pounds.....	288.00	54.00

(Note: Prices delivered to feed barns near Verona. Buyer spent a month buying up the cattle in small lots. Many were injured in transit).

Calf supply alternatives. The Italian demand for calf imports is approaching 2 million head per year. East and West European sources are diminishing, creating a situation frequently referred to as a "crisis". It is reported that Ethiopian calves are being imported illegally through Yugoslavia. Officials and industry leaders hope to import calves from Latin America and Africa and accept the health hazards.

Under present circumstances, there are indications that it may be profitable to feed dairy-beef crossed baby calves and beef calves from the U.S.A. (See Appendix Table 9). However, there are other possibilities for supplying calves. Given time to develop, cow/calf operations may be profitable or certainly could be made profitable with modest EC assistance. The principal areas potentially suitable for cow/calf operations are: in France, the Massif Central, the regions adjacent to the foothills of the Alps and the Pyrenees; in Belgium, France, and Germany, most of the areas on both sides of the German-Belgian-French frontiers and in Southern Bavaria; and in Italy, some of the regions adjacent to the foothills of the Alps and in Southern Italy, Sicily, and Sardinia.

Cow/calf operations, plus backgrounding, could be made a profitable alternative to milk and grain production on small farms with modest EC assistance. In some of the areas identified as suitable for cow/calf operations, green chop or silage can be made available at under \$7 per ton. Assuming that 6,000 pounds of TDN per year are needed for a brood cow to rear a 600-pound feeder worth \$300, the feeder costs (including supplements), plus replacement costs, plus 20 cents/head per day, are under \$170. Thus, it appears that a cow/calf operator might obtain around \$100 per head per year in profit before tax.

Spain could become a supplier of breeding and feeder calves to the EC.

Feeds and profits from feeding. Market prices for principal feeds are shown in Appendix Table 7. The best prices available are for the Netherlands. Grain prices are very high because of the common agricultural policies of the EC resulting in variable levies being applied to imported feedgrains.

A significant element of the feed cost is the price of roughage in the form of corn, sorghum, or other silage; alfalfa; or other hay. Prices are very difficult to obtain. In most places, except northern Germany, yields of silage run from 18 to 20 tons per acre. In Italy, a barley or oat silage crop plus a corn silage crop are possible in the same year. Land use for barley grosses the farmer about \$100 per acre, or 1.2 tons per acre at \$85 per ton. By producing 18 tons of silage at \$12 per ton, he would gross \$216 per acre. Thus, by almost any assumed reasonable cost of producing the two crops, the farmer would be better off to produce corn silage at \$12 per ton if a market were available. If EC grain support prices were reduced, the advantage for farmers to produce silage would increase. For purposes of the calculations that follow, corn silage was priced at about \$12 per short ton.

Linear programed rations and costs. See Appendix Tables 6, 7, 8, 9, and 10. Table 6 shows the composition of least-cost-rations, the ingredient costs per hundred weight, feed cost per pound of gain, and the percent of the ingredients of potential U.S. origin which are now competitively priced at several locations in Europe. All data shown were computed with the FAS Linear-programed, Beef Mix System. (The difference between the cost of the ration in the United Kingdom and in the EC countries in Table 6 indicates the effect of the levy system on feed costs of gain). Table 7 shows the feed ingredient prices used in computing the least-cost rations. Table 8 shows the estimated feed intake, rate of gain, feed conversion, and costs of gain at progressive weights of the animal, based on the Italian ration. Table 9 shows an estimate of profit in Italy for feeding out 120-pound, dairy beef-crossed, baby calves and 400-pound beef calves of U.S. origin. The feed cost of gain was taken as 110 percent of the computed cost to allow for error in prices or computed conversions. Although these projected profits are believed to be reasonable, they are offered with all of the qualifications included elsewhere in this report. Reported profits by feeders are shown in Appendix Table 10.

#### Summary and Conclusions

Profits from producing beef in Europe are attractive by U.S. standards. EC prices for feeder calves with high genetic capability for efficient beef production are about \$70 to \$80 per cwt., and feed costs range from 17-24 cents per pound of gain. Dressed beef prices range from 22 percent in Paris to 50 percent in Milan over those in New York for roughly comparable grades. Slaughtering margins are one-third greater in Italy than in the United States. Profits from feeding at observed operations range from \$126 per head on a 120-day feedout in an efficient operation in Italy to losses in France.

Limitations on the survey's findings resulted from two factors:

1. Cost and price data available from feeders, abattoirs, officials, and market reports were inadequate.
2. Because observations were made at 17 locations in seven countries in 34 days, the depth of study possible was limited.

Caution. Large-scale beef production in Europe is a recent development, and detailed and reliable information is not readily available. Anyone planning to seek business opportunities in that industry should proceed with caution until more information becomes available or at least until better information is developed for specific locations.

Meaningful target. To increase indigenous beef production in the EC enough to supply 20 pounds more beef per capita per year would require:

- 4,000,000,000 additional pounds of beef at retail.
- 6,000,000 additional head finished.
- 8,400,000 additional tons of concentrates.
- 36,000,000 additional tons of silage or forage equivalent.

Beef production on a commercial scale has developed in the last 5 years in Italy and Germany. One-half million head of cattle were reported on feed in northern Italy, and in Bavaria 5,000 farms were reported to be feeding 30 to 200 head per year.

Almost without exception, feeders wanted to expand their operations. Several large feeders, feed mills, and outside investors want American management and financial participation to expand or commence beef enterprises.

Shortage of feeder calves is given as the principal limitation on increasing beef production. It may be profitable to feed quality beef calves from the United States.

The crux of CAP problems is the high-support prices and resulting surplus of milk. Skim milk powder is subsidized to four-fifths of the support level for use in milk replacer for veal calves. White veal sells at a premium; thus, veal is more profitable to produce than beef. As a result, nearly 8 million head of calves are vealed and therefore consume no grain, protein supplement, or roughage.

The solution to the major CAP problem lies in creating a profitable alternative for small and inefficient milk and grain producers. Beef production requiring high levels of high-nutrient roughages offers an alternative.

CAP price support programs currently cost \$3 billion per year. The estimate for next year is \$4 billion, and in later years up to \$5 or \$6 billion. The dairy program alone costs about \$300 million, or about \$40 per dairy cow per year. The diversion of only a small part of these price support outlays would accelerate cow/calf operations, backgrounding, and finishing operations and divert production of surplus milk and grain to marketable beef.

Spain has the potential, including available financial resources, for supplying large numbers of feeder cattle to Italy and the Common Market.

Initiative and management are the principal need.

The Italian demand for calf imports is approaching 2 million head per year. East and West European sources are diminishing, creating a situation frequently referred to as a "crisis". It is reported that Ethiopian calves are being imported illegally through Yugoslavia. Hope is being held out by officials and leaders of importing calves from Latin America and Africa and accepting the health hazards.

Large areas of land formerly in farms have been abandoned in parts of Italy, France, and Germany. Available information indicates that these areas are suitable for cow/calf operations.

There is a great reserve of private and government resources--financial, technical, and human--waiting to be used to increase beef production. What is missing is management.

It is not clear why beef production in the EC is not expanding more rapidly. It appears to be profitable; there is private, corporate, and government interest in increasing it; and it could increase farm income, reduce the costs of the CAP, and help the EC move toward a logical restructuring of agriculture. This would facilitate changes in the CAP that would lessen foreign trade frictions. By applying efficient technologies to beef production, slaughter, and marketing, the EC market could absorb a large increase in beef production.

However, an economically meaningful expansion of beef production in Europe will develop slowly until Europeans take steps such as:

1. Actions by private interests

Establish as private enterprises the elements essential for vertically-coordinated beef production in areas with high potential.

2. Actions by member governments

a. Help to harmonize market grades and standards and sanitary and health regulations so that beef production and marketing can be developed for the EC on the most efficient possible basis over the largest possible market area.

- b. Cooperate to coordinate research and demonstrations for developing systems for breeding and feeding for beef production.
- c. Assure that taxes and regulations encourage the efficient production and distribution of beef.

3. Actions for the EC

- a. Develop and implement the CAP to give small inefficient producers of milk and grain a profitable alternative in beef production so that support prices of milk and grain can be reduced without depriving these small producers of income; this would accelerate beef production with lower cost concentrates.
- b. Pay incentives to producers of beef and dairy--beef calves.
- c. Eliminate duties on imported beef and dairy-beef animals for feeding and breeding.
- d. Provide loans and credits for beef enterprise infrastructure.
- e. Encourage and/or assist the establishment of pilot and demonstration beef enterprises and supporting infrastructure, particularly cow/calf operations, back-grounding operations, and slaughter and marketing operations which have the muscle and management capabilities to efficiently market rapidly increasing quantities of beef throughout the EC.

#### EXPLANATION OF CHARTS

Five charts follow which give the best available data on market price quotations for beef and calves. No market price quotations are available for dressed veal.

Cattle (liveweight) are all cattle which are mostly culled dairy cattle. Prices are supported at or near this level by the EC.

Calves (liveweight) are all calves and include a wide range of quality grades. These are at or near prices supported by the EC. Prices for baby beef should be equal to or greater than the average of calf prices shown.

Carcass beef is "first quality" which is seldom equal to "U. S. Good" and often equal to "U. S. Standard." Baby beef carcasses should bring substantially more than the carcass prices shown in the charts.

Interpretation. The following table shows estimated costs of beef in Italy:

Cost Item	Cost	Live <sup>1/</sup> weight	Dressed <sup>2/</sup> weight
	U. S. dol.	Cents per lb.	Cents per lb.
Calf cost.....	132 <sup>3</sup> / <sub>4</sub>	12.0	20.0
Feed cost.....	213 <sup>1</sup> / <sub>4</sub>	19.4	32.3
Non-feed cost.....	96	8.7	14.5
Slaughter.....	15 <sup>5</sup> / <sub>8</sub>	--	2.3
Total cost.....		40.1	69.1

<sup>1/</sup> For animal weighing 1,100 lb.

<sup>2/</sup> For carcass weighing 660 lb.

<sup>3/</sup> U. S. calf, c.i.f., Verona, Italy.

<sup>4/</sup> Computer least-cost ration, ingredients only.

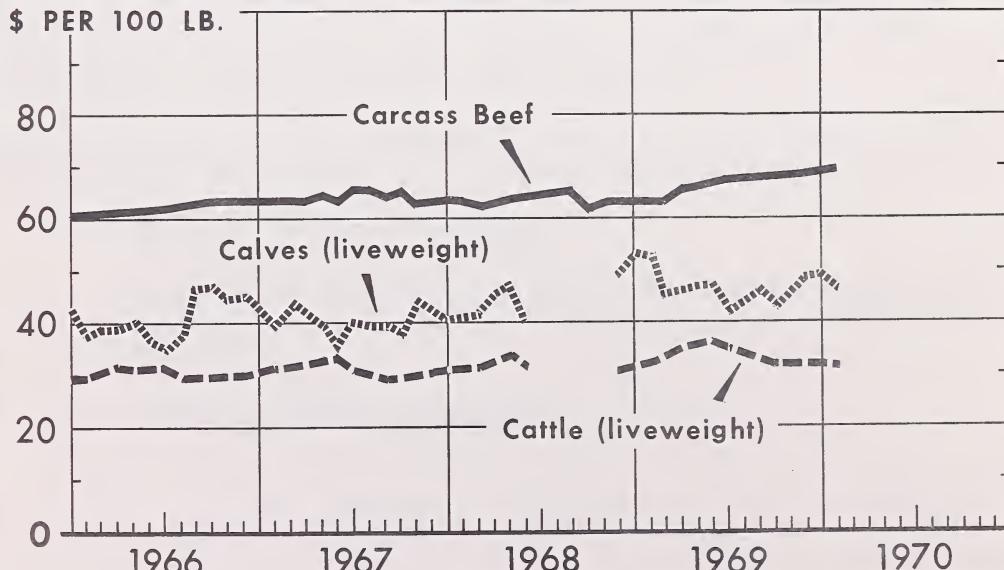
<sup>5/</sup> Assuming that the byproducts pay for the cost of slaughter and that \$15 per head is a reasonable margin.

Thus, the cost of producing choice slaughter animals in Italy is only a little above the current price for all slaughter cattle as shown in chart number 4, and the cost of producing a "choice" carcass is less than the carcass beef price for "good."

CHART NO. 1

## BELGIUM

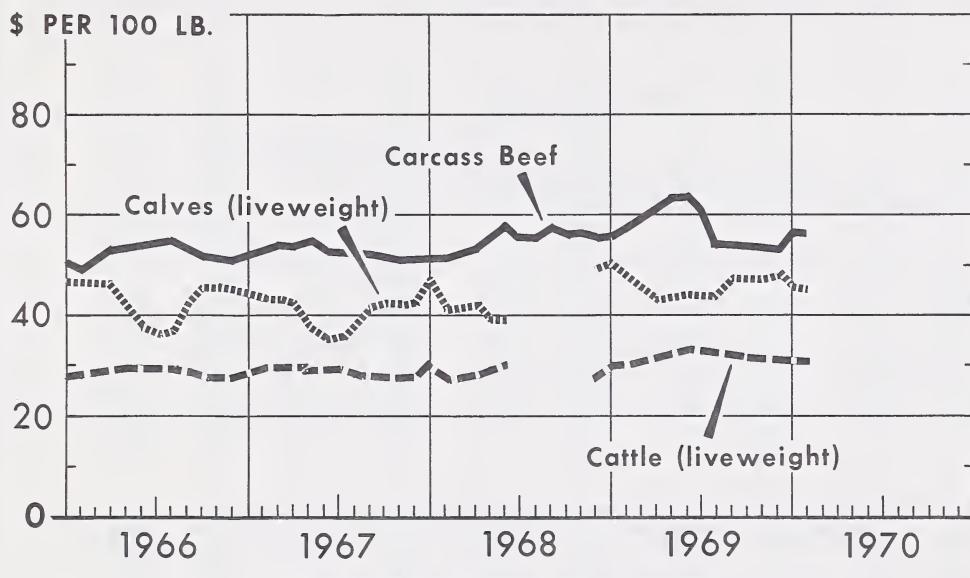
Wholesale Prices for First Quality Carcass Beef at Brussels  
and National Average Market Prices of Cattle and of Calves,  
Liveweight, in Dollars Per 100 Pounds, by Months, from 1966



SOURCE: REUTERS MEAT REPORT AND EC COMMISSION

**FRANCE**

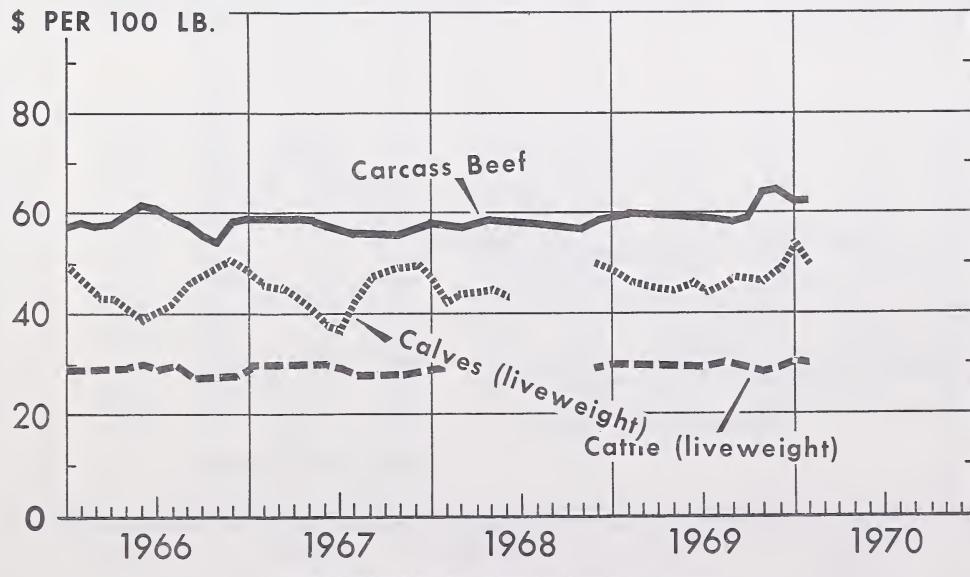
Wholesale Prices for First Quality Carcass Beef at Paris  
and National Average Market Prices of Cattle and of Calves,  
Liveweight, in Dollars per 100 Pounds, by Months, from 1966



SOURCE: REUTERS MEAT REPORT AND EC COMMISSION

**GERMANY**

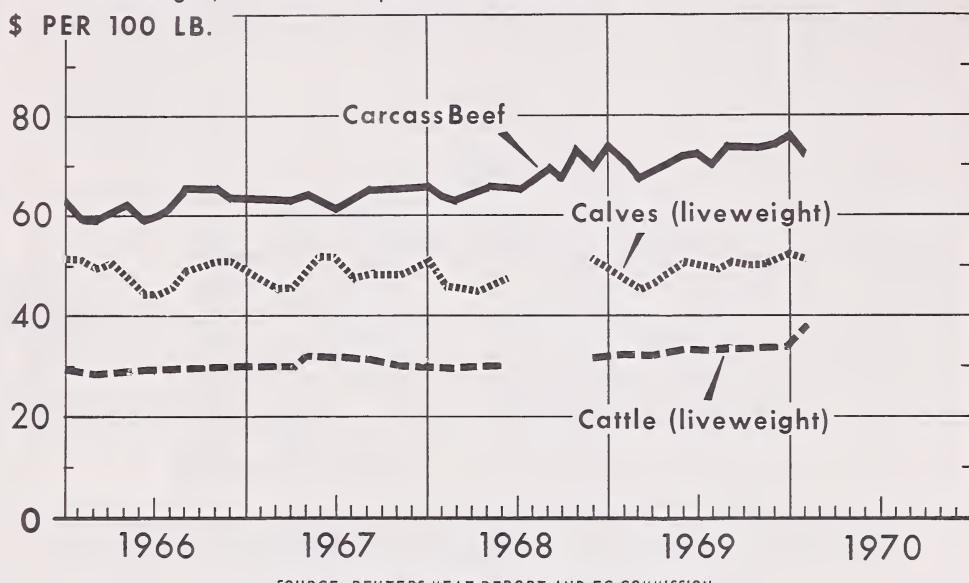
Wholesale Prices for First Quality Carcass Beef at Hamburg  
and National Average Market Prices of Cattle and of Calves,  
Liveweight, in Dollars per 100 Pounds, by Months, from 1966



SOURCE: REUTERS MEAT REPORT AND EC COMMISSION

## ITALY

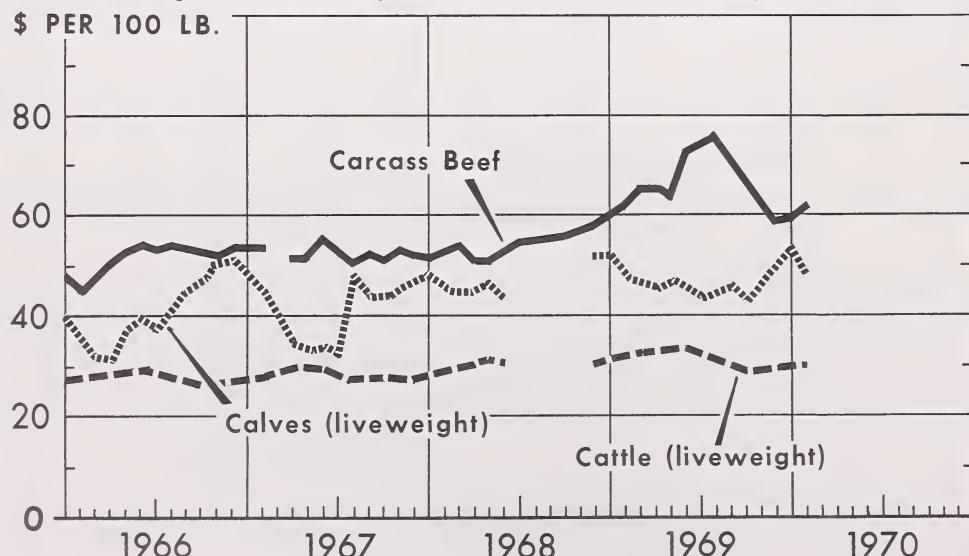
Wholesale Prices for First Quality Carcass Beef at Milan  
and National Average Market Prices of Cattle and of Calves,  
Liveweight, in Dollars per 100 Pounds, by Months, from 1966



SOURCE: REUTERS MEAT REPORT AND EC COMMISSION

## NETHERLANDS

Wholesale Prices for First Quality Carcass Beef at Rotterdam  
and National Average Market Prices of Cattle and of Calves,  
Liveweight, in Dollars per 100 Pounds, by Months, from 1966



SOURCE: REUTERS MEAT REPORT AND EC COMMISSION

## EC GRAIN PRODUCTION AND SUPPLY-DISTRIBUTION

Commodity and year	Begin- ning stocks	Yield				Imports		Net trade <sup>1</sup>	Intra- EC trade	Domestic consumption	
		Acreage	per acre	Pro- duction	From U.S.	Total <sup>1</sup>	Exports <sup>1</sup> (imports-+)			For feed	Total
		1,000 metric tons	1,000 acres	Metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
Total grain:											
1955-56	9,237	53,784	0.90	47,977	4,174	11,380	3,308	+8,072	971	25,940	55,484
1956-57	9,802	52,983	.92	48,507	5,400	13,778	2,546	+11,232	1,473	29,037	57,799
1957-58	11,742	54,132	.91	49,182	2,954	10,533	3,420	+7,113	1,915	29,046	58,195
1958-59	9,842	53,979	.92	49,446	4,589	12,200	2,612	+9,588	1,042	29,693	58,844
1959-60	10,032	53,764	.99	52,701	4,790	12,989	2,985	+10,004	1,536	32,749	61,985
1960-61	10,752	53,341	1.01	53,343	5,844	13,803	3,375	+10,428	2,044	33,224	62,602
1961-62	11,921	52,781	.95	49,556	6,925	16,999	3,749	+13,250	2,475	34,282	63,864
1962-63	10,863	53,638	1.08	57,756	6,887	15,128	5,476	+9,652	1,490	35,447	65,033
1963-64	13,238	52,578	1.09	56,704	6,756	16,408	6,970	+9,438	2,380	38,202	67,608
1964-65	11,772	52,746	1.14	59,431	7,440	16,541	9,244	+7,297	3,035	38,634	68,191
1965-66	10,309	52,521	1.15	60,206	11,054	20,459	9,574	+10,885	3,747	39,453	69,715
1966-67	11,685	51,844	1.12	57,984	9,847	19,963	8,071	+11,892	3,329	41,412	71,363
1967-68	10,547	51,518	1.32	68,157	8,270	18,785	8,541	+10,244	4,985	44,365	74,795
1968-69 <sup>2</sup>	14,153	52,192	1.34	69,701	6,894	16,550	9,300	+7,250	7,200	44,725	74,304
1969-70 <sup>3</sup>	16,800	52,726	1.32	69,680	—	14,675	10,850	+3,825	6,400	46,300	76,500
1970-71 <sup>3</sup>	13,805	—	—	—	—	—	—	—	—	—	—
Wheat:											
1955-56	5,784	26,912	.91	24,328	1,380	4,651	2,423	+2,228	775	3,350	25,806
1956-57	6,534	22,412	.84	18,730	3,138	6,951	1,220	+5,731	305	1,935	23,753
1957-58	7,206	27,534	.89	24,559	868	3,899	3,152	+747	922	3,954	26,150
1958-59	6,362	27,497	.89	24,316	971	4,164	2,117	+2,047	618	4,454	26,621
1959-60	6,104	26,667	.97	25,814	646	3,377	2,286	+1,091	831	5,472	27,565
1960-61	5,444	26,329	.92	24,137	1,846	5,888	1,799	+4,089	692	4,886	27,129
1961-62	6,541	24,942	.93	23,060	1,991	5,868	2,323	+3,545	866	4,481	26,798
1962-63	6,348	26,709	1.11	29,495	677	3,478	3,786	-308	371	5,079	27,373
1963-64	8,162	24,648	1.00	24,438	1,092	4,111	3,776	+335	699	4,668	26,794
1964-65	6,141	26,272	1.11	29,158	687	3,548	5,669	-2,121	733	5,525	27,591
1965-66	5,587	26,259	1.16	30,369	1,500	4,245	5,838	-1,593	938	5,346	27,609
1966-67	6,754	24,801	1.06	26,309	1,536	4,280	4,479	-199	690	5,540	27,417
1967-68	5,447	24,038	1.30	31,207	1,265	3,615	4,917	-1,302	1,361	5,829	27,741
1968-69 <sup>2</sup>	7,611	25,226	1.28	32,290	1,645	4,250	5,200	-950	2,900	8,025	29,451
1969-70 <sup>3</sup>	9,500	25,034	1.26	31,460	—	3,525	6,650	-3,125	2,600	9,500	31,000
1970-71 <sup>3</sup>	6,835	—	—	—	—	—	—	—	—	—	—
Total coarse grains:											
1955-56	3,453	26,872	.76	23,649	2,794	6,729	885	+5,844	196	22,590	29,678
1956-57	3,268	30,571	.98	29,777	2,262	6,863	1,326	+5,537	1,168	27,102	34,046
1957-58	4,536	26,598	.93	24,623	2,086	6,634	268	+6,366	993	25,092	32,045
1958-59	3,480	26,482	.96	25,130	3,618	8,036	495	+7,451	424	25,239	32,223
1959-60	3,928	27,097	1.00	26,887	4,144	9,612	699	+8,913	705	27,277	34,420
1960-61	5,308	26,988	1.09	29,206	3,998	7,915	1,576	+6,339	1,352	28,338	35,473
1961-62	5,380	27,838	.96	26,496	4,934	11,131	1,426	+9,705	1,609	29,801	37,066
1962-63	4,515	26,929	1.06	28,261	6,210	11,650	1,690	+9,960	1,119	30,368	37,660
1963-64	5,076	27,930	1.17	32,266	5,664	12,297	3,194	+9,103	1,681	33,534	40,814
1964-65	5,631	26,474	1.16	30,273	6,753	12,993	3,575	+9,418	2,302	33,159	40,600
1965-66	4,722	26,262	1.15	29,837	9,554	16,214	3,736	+12,478	2,809	34,107	42,106
1966-67	4,931	27,043	1.17	31,673	8,311	15,683	3,592	+12,091	2,639	35,872	43,947
1967-68	5,100	27,480	1.34	36,950	7,005	15,170	3,624	+11,546	2,542	38,536	47,054
1968-69 <sup>2</sup>	6,542	26,966	1.40	37,411	5,249	12,300	4,100	+8,200	4,300	36,700	44,853
1969-70 <sup>3</sup>	7,300	27,692	1.40	38,220	—	11,150	4,200	+6,950	3,800	37,300	45,500
1970-71 <sup>3</sup>	6,970	—	—	—	—	—	—	—	—	—	—

<sup>1</sup> Excludes intra-trade, i.e., trade between EC member countries. <sup>2</sup> Acreage and yield data are as reported by official EC sources; all other data are preliminary estimates prepared by FAS based on changes from 1967-68 as reported by U.S. agricultural attachés in the member countries of the EC. <sup>3</sup> Acreage and yield data are as reported by official EC sources; all other data are forecasts prepared by FAS based on unofficial reports of current EC market and supply-demand conditions.

Source: All acreage and yield data taken from the official EC *Production Végétale*; imports from the United States are from the official returns of member countries; all other data from the official EC *Statistique Agricole*.

APPENDIX TABLE 2

ANNUAL PER CAPITA CONSUMPTION OF MAJOR MEATS, 1960-61 TO 1967-68, EC AND U.S.  
Carcass weight, excluding slaughter fat

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
-----Pounds per capita per year-----								
Beef:								
BLEU 1/.....	43	45	47	48	45	46	48	47
France.....	40	41	42	42	43	44	44	44
West Germany.....	39	41	43	43	42	43	44	44
Netherlands.....	37	39	43	44	38	38	41	42
Italy.....	26	28	32	35	26	32	34	<u>2/</u> 40
EC.....	36	37	40	41	38	39	41	43
United States 3/..	85	88	89	94	100	99	104	106
Veal:								
BLEU 1/.....	5	4	6	6	4	5	5	5
France.....	19	18	18	17	17	16	17	17
West Germany.....	4	4	5	4	4	4	4	4
Netherlands.....	3	4	5	3	3	3	2	2
Italy.....	4	4	5	3	7	6	7	<u>2/</u> 8
EC.....	8	8	8	7	8	8	8	9
United States 3/..	6	6	6	5	5	5	4	4
Pork:4/								
BLEU 1/.....	44	47	47	45	49	52	53	54
France.....	47	47	48	53	53	51	52	55
West Germany.....	66	69	70	69	74	74	73	79
Netherlands.....	41	42	40	35	41	44	43	43
Italy.....	15	15	15	15	18	17	17	<u>2/</u> 20
EC.....	43	45	45	45	49	48	49	52
United States 3/..	65	62	64	65	65	58	58	64
Poultry:								
BLEU 1/.....	17	19	19	18	17	17	15	15
France.....	19	21	22	23	25	26	27	28
West Germany.....	10	12	12	12	13	14	15	16
Netherlands.....	4	5	6	7	8	10	10	11
Italy.....	9	10	11	13	16	16	16	<u>2/</u> 22
EC.....	12	14	14	15	17	18	18	21
United States 3/..	34	38	37	38	39	41	44	46

1/ Belgium-Luxembourg Economic Union. 2/ New series starting in 1967-68. 3/ U.S. data on calendar year basis; i.e., 1968-69 refers to 1968 for U.S. 4/ Excluding lard.

Source: Statistique Agricole, Office Statistique des Communautés Européennes, Brussels (1964-69); Statistique Agricole, No. 59, 1969, Ministère De l'Agriculture, France.

Prepared by Demand and Competition Section, Europe and Soviet Union Branch, FRAD, ERS, USDA.

APPENDIX TABLE 3

MARKET PRICES FOR SLAUGHTER CALVES AND FOR DRESSED VEAL IN EC COUNTRIES

Item	:	Dec. 1968	:	March 1969	:	June 1969	:	Sept. 1969	:	Dec. 1969
----- U.S. dollars/cwt. -----										
<b>Live calves:1/</b>										
Belgium.....	:	49.34		44.71		44.88		44.31		49.00
Germany.....	:	49.90		45.32		45.42		46.58		49.35
France.....	:	48.65		43.81		43.32		47.01		47.18
Italy.....	:	50.62		45.12		49.83		50.39		51.39
Netherlands.....	:	53.34		44.94		44.85		44.72		50.37
	:									
<b>Dressed veal:2/</b>										
Belgium, Anderlecht...	:	87.32		82.46		85.28		83.92		<u>3/</u> 86.18
Germany, Dusseldorf...	:	90.54		85.73		82.19		84.41		<u>3/</u> 83.64
France, Paris.....	:	79.29		81.65		75.62		81.74		<u>3/</u> 84.32
Italy, Milan.....	:	92.35		80.92		88.00		84.91		<u>3/</u> 94.35
Netherlands, Rotterdam	:	96.57		80.11		80.79		78.56		<u>3/</u> 89.45
	:									
	:									

1/ National average price for all calves. 2/ Price in major markets for first quality. 3/ Preliminary.

Agrarmarkte, EC Commission.

APPENDIX TABLE 4

CATTLE AND CALF SLAUGHTER-EC, 1960-1968

Item	1960	1961	1962	1963	1964	1965	1966	1967	1968
----- Million head -----									
<b>Belgium:</b>									
Cattle.....	.7	.7	.7	.8	.7	.7	.7	.8	.8
Calves.....	.3	.3	.3	.3	.3	.3	.3	.3	.2
Total.....	1.0	1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.0
<b>France:</b>									
Cattle.....	3.0	3.3	3.5	3.4	3.1	3.2	3.4	3.8	3.9
Calves.....	4.5	4.7	4.8	4.7	4.3	4.2	4.2	4.5	4.5
Total.....	7.5	8.0	8.3	8.1	7.4	7.4	7.6	8.3	8.4
<b>Germany, W.:</b>									
Cattle.....	3.6	3.7	4.0	4.2	3.9	3.8	4.0	4.0	4.2
Calves.....	2.1	1.9	2.0	2.2	1.9	1.6	1.7	1.6	1.4
Total.....	5.7	5.6	6.0	6.4	5.8	5.4	5.7	5.6	5.6
<b>Netherlands:</b>									
Cattle.....	.7	.7	.8	1.0	.8	.8	.8	.8	.9
Calves.....	.7	.6	.7	.9	.7	.7	.8	.8	.8
Total.....	1.4	1.3	1.5	1.9	1.5	1.5	1.6	1.6	1.7
<b>Italy:</b>									
Cattle 1/.....	(2.5)	(3.1)	(3.3)	(3.0)	(2.5)	(2.4)	(2.9)	(3.1)	(3.1)
Calves.....	(0.6)	(0.8)	(0.8)	(0.8)	(0.6)	(0.6)	(0.7)	(0.8)	(0.8)
Total.....	3.1	3.9	4.1	3.8	3.1	3.0	3.6	3.9	3.9
<b>EC:</b>									
Cattle.....	10.5	11.6	12.4	12.3	11.0	10.9	11.8	12.5	12.8
Calves.....	8.2	8.2	8.6	8.8	7.7	7.4	7.6	7.8	7.7
Total.....	18.7	19.8	21.0	21.1	18.7	18.3	19.4	20.3	20.5

1/ Cattle and calves breakdown estimated - 1/5 calves, 4/5 cattle.

Source: Meat - The Commonwealth Secretariat.

## EUROPEAN AGRICULTURAL GUIDANCE AND GUARANTEE FUND (FEOGA)

FEOGA expenditures	Calendar years			
	1966	1967	1968	1969
	Millions of dollars			
Guarantee section.....	51	403	1683	2059
Export subsidies, total.....	42	333	951	1105
Grain.....	40	216	479	489
Dairy products.....	--	88	317	338
Pork.....	--	22	55	43
Eggs.....	1	2	3	2
Poultry.....	1	3	8	6
Beef.....	--	--	2	9
Rice.....	--	1	8	18
Fats and oils.....	--	--	(1/)	8
Fruits and vegetables.....	--	--	2	2
Sugar.....	--	--	60	170
Processed commodities.....	--	--	18	20
Processed fruits and vegetables.....	--	--	--	(1/)
Domestic programs, total....	9	66	727	951
Grain.....	9	31	192	217
Intervention.....	3	16	27	26
Other.....	6	15	165	191
Dairy products.....	--	35	185	2/315
Fats and oils.....	--	--	272	228
Fruits and vegetables.....	--	--	27	45
Rice.....	--	--	(1/)	(1/)
Pork.....	--	--	(1/)	(1/)
Beef.....	--	--	(1/)	13
Sugar.....	--	--	50	132
Intervention.....	--	--	--	64
Other.....	--	--	--	68
Other expenses, total.....	--	4	5	3
Sugar-special reimbursement:				
to Belgium.....	--	4	3	1
Grapeseed oil.....	--	--	2	1
Feed grains--Italian imports.....	--	--	--	1
Guidance section, total....	17	104	154	350
Unexpended prior year balance.....			30	65
New authority.....			124	285
Special sections, total....	--	--	208	140
Grain price compensation to:				
Germany, Italy, and Luxembourg.....	--	--	206	138
Aid to Luxembourg.....	--	--	2	2
Food aid.....	--	3/84	3/112	3/132
Total FEOGA.....	68	591	2157	2681

1/ Unknown or less than \$500,000. 2/ Excludes \$170 million which EC Council voted to charge to Member States directly. 1968 and 1969 are budget estimates.  
 3/ Estimate.

Source: Official Journal of the European Communities, No. L 109, 5/10/68, and No. L 36, 2/12/69.

COMPOSITION OF COMPUTED LEAST-COST BEEF-FATTENING  
RATION AT VARIOUS LOCATIONS IN EUROPE 1/

Ingredient	1/20/70	2/2/70	2/5/70	10/15/69	2/13/70
	Milan	Paris	Rotterdam	Hamburg	London
:----- (Percent of LCR - 90% DM Basis) -----:					
Corn silage.....	53.85	35.40	31.86	50.13	31.03
Wheat.....	--	58.10	--	--	--
Barley.....	4.73	--	--	--	65.60
Soybeans.....	15.96	--	15.31	17.65	--
Soybean meal <u>2/</u> .....	--	--	--	--	--
Corn <u>2/</u> .....	--	--	--	--	--
Cassava.....	15.00	--	10.35	11.91	--
Beet pulp.....	5.00	5.00	5.00	5.00	--
Hominy feed.....	--	--	20.00	--	--
Molasses.....	--	--	10.00	10.00	--
:					
Citrus pulp.....	--	--	7.48	--	--
Cottonseed meal.....	--	--	--	--	2.08
Tallow.....	5.00	--	--	5.00	--
Meat meal.....	--	.39	--	--	--
:					
Bone meal.....	.12	--	--	--	--
Urea.....	--	.60	--	--	.60
Dical-Phos.....	--	.51	--	.15	--
Lime.....	.34	.51	--	.16	.70
:					
Memorandum:					
:					
Ingredient cost/cwt.....	\$ 3.02	\$ 2.82	\$ 2.82	\$ 2.70	\$ 2.32
:					
Estimated cost of gain/lb. <u>3/</u> .....	.193	.182	.181	.173	.150
:					
U.S. origin (percent).....	25.96	5.00	47.79	27.65	2.08
:					

1/ Ration specifications: Productive energy - 51 megacals/cwt. CA - .4%  
Dig. protein - 8.75% Ph - .3%

2/ Did not come into least-cost ration at prevailing prices.

3/ For 700-lb. steers consuming 21 lb./day.

PRICES OF INGREDIENTS CONSIDERED IN COMPUTATION OF LEAST-COST  
BEEF-FATTENING RATION AT VARIOUS LOCATIONS IN EUROPE

Ingredient	1/20/70	2/2/70	2/5/70	10/15/69	2/13/70
	Milan	Paris	Rotterdam	Hamburg	London
----- (In U.S. dollars per short ton) -----					
Grains:					
Barley.....	78.80	66.60	79.60	80.40	50.40
Corn.....	85.60	71.40	86.80	86.60	59.00
Milo.....	1/	68.20	83.80	80.40	1/
Oats.....	81.00	68.20	72.60	75.80	48.80
Wheat (feed).....	1/	67.40	77.60	76.40	59.40
Oilseed and pulses:					
Beans, field/navy.....	1/	1/	74.20	77.00	1/
Peas, cull.....	1/	1/	76.00	1/	1/
Soybeans.....	104.00	1/	94.00	84.40	107.20
Oil meals:					
Copra meal.....	1/	1/	1/	1/	84.60
Cottonseed meal, OP.....	1/	1/	79.00	1/	86.20
Cottonseed meal, Sol.....	1/	88.80	72.60	1/	80.40
Linseed meal.....	115.60	88.00	80.80	1/	104.40
Soybean meal 44%.....	104.20	106.80	84.00	86.60	110.80
Soybean meal 49%.....	109.80	116.60	1/	1/	1/
Byproducts:					
Beet pulp, dry.....	65.00	57.60	61.40	52.20	64.00
Brewers grains, dry.....	1/	57.60	1/	1/	52.40
Citrus pulp.....	1/	1/	56.40	1/	50.00
Corn gluten feed.....	1/	1/	74.40	69.60	65.40
Hominy feed.....	1/	1/	64.60	1/	56.80
Rice bran.....	57.80	1/	1/	1/	59.40
Wheat bran.....	82.40	61.60	55.80	1/	1/
Wheat mill run.....	1/	1/	62.60	1/	55.80
Vegetable and animal fats and oils:					
Animal fat.....	182.20	1/	177.80	1/	1/
Beef tallow.....	151.00	171.40	1/	184.80	157.40
Soybean oil.....	278.40	1/	1/	1/	269.00
Roughages:					
Alfalfa dehy. 17%.....	79.60	51.80	58.20	52.60	67.00
Alfalfa hay.....	50.60	29.60	1/	1/	1/
Corn silage (30% DM).....	11.93	12.67	11.93	10.80	12.00
Grass hay.....	1/	24.60	45.20	1/	1/
Other:					
Bone meal.....	78.00	1/	1/	71.40	1/
Cassava.....	62.20	94.40	55.40	57.00	74.40
Dicalcium phosphate.....	1/	72.40	1/	86.20	76.00
Limestone, ground.....	8.00	9.80	1/	6.80	10.20
Meat meal.....	130.20	98.60	1/	107.80	126.40
Molasses.....	47.80	41.00	37.08	32.51	37.08
Whey, dried.....	130.20	1/	1/	1/	131.80

1/ Not available.

ESTIMATED FEEDLOT PERFORMANCE OF STEERS BASED  
ON 51 MEGACAL/CWT. RATION AT MILAN 1/20/70 1/

Weight class	:	Days in lot	:	Feed intake	:	Rate of gain	:	Feed conversion	:	Feed cost of gain
(lb. liveweight)	:	(days)	:	(lb./da)	:	(lb./da)	:	(lb. of feed per lb. of gain)	:	(¢/lb.)
400-450.....	:	18.4		12		2.71		4.42		13.3
450-550.....	:	34.0		15		2.94		5.11		15.4
550-650.....	:	32.1		18		3.12		5.76		17.4
650-750.....	:	30.4		21		3.29		6.39		19.3
750-850.....	:	30.8		23		3.25		7.08		21.4
850-950.....	:	32.7		24		3.06		7.85		23.7
950-1050.....	:	34.5		25		2.90		8.62		26.0
1050-1100.....	:	18.1		26		2.77		9.38		28.3
	:									

## Memorandum:

Total days in lot..... 231  
 Total feed..... 4,773 lb. (90% DM basis)  
 Average rate of gain..... 3.03 lb./day  
 Average feed conversion..... 6.8 to 1  
 Total feed cost..... 144.14  
 Average feed cost/lb. gain..... 20.59 cents

1/ Ration specifications: Productive energy = 51 megacals/cwt.  
 Dig. protein = 8.75%  
 CA = 0.4%  
 PL = 0.3%

## ESTIMATED PROFITS FROM FEEDING OUT AMERICAN BEEF CALVES IN ITALY

Item	:	120-lb. calf	:	400-lb. calf
	:	Dollars	:	Dollars
Selling price - 1,100 lb. @ \$51/cwt.....	:	559		559
Less:	:			
Calf - choice.....	:	1/67		2/164
Preconditioning and certification.....	:	25		25
Air freight.....	:	40		73
C.I.F. price.....	:	132		262
Duty - 8 percent of c.i.f.....	:	11		21
Feed - 110 percent of LCR <u>3/</u> .....	:	213		159
Yardage - 4.5¢/lb. of gain.....	:	44		32
Veterinary and medicine.....	:	12		8
Interest @ 8.5 percent.....	:	13		16
Insurance.....	:	13		9
Selling commission.....	:	3		3
	:	309		248
Total costs.....	:	441		510
Net profit per head before tax.....	:	118		49
Return/unit of capacity/year.....	:	124		76

1/ Calf from Holstein cow, certified to have been sired by a "performance tested beef bull." 2/ Calf from a beef-breed cow certified to have been sired by a "performance tested bull." 3/ Based on computerized ration with 51 megacals of productive energy per cwt. and average feed intake and using Milan prices in mid-January.

Note: Assumed price received at slaughter is equal to the national average price for all calves. In known instances, baby beef sold at higher prices. It is not known how baby beef prices would behave if large quantities began coming on the market. It is assumed that dairy beef crosses and beef animals from the U.S. could yield lean meat that would be comparable to Charolais and Limousin.

## PROFIT PER HEAD FROM FINISHING BEEF REPORTED BY INDIVIDUAL FEEDERS

	Unit	Italy 1/	U.K.	France	Germany I	Germany II
Final weight.....	Lb.	1100.00	840.00	1210.00	1102.00	1020.00
Initial weight.....	Lb.	480.00	2/100.00	660.00	110.00	414.00
Total gain.....	Lb.	620.00	740.00	550.00	992.00	606.00
Days on feed.....	Days	120.00	296.00	208.00	(3/)	244.00
Average daily gain.....	Lb.	5.20	2/2.50	2.65	(3/)	2.48
Total feed (lb. dry)....	Lb.	3160.00	3600.00	4000.00	(3/)	3750.00
Total feed cost.....	Dol.	109.00	96.60	98.80	196.00	123.00
Feed/lb. gain.....	Ratio	5.1:1	4.9:1	7.3:1	(3/)	6.2:1
Feed cost/lb. gain.....	Cents	17.6	13.1	18.0	19.8	20.3
.....						
Death loss.....	Dol.	4/14.00	9.60	--	--	--
.....						
Non-fed cost--total.....	Dol.	37.00	30.60	27.50	56.00	36.00
Non-feed cost/lb. gain..	Cents	6.00	4.10	5.00	5.70	6.00
.....						
Selling price/cwt.....	Dol.	58.75	25.71	34.40	35.93	34.30
Total selling price.....	Dol.	646.00	216.00	416.00	396.00	350.00
.....						
Purchase price/cwt.....	Dol.	75.00	48.00	38.00	2/40.00	40.00
Total purchase price....	Dol.	360.00	5/21.00	251.00	44.00	165.60
.....						
Break-even price.....	Dol.	520.00	184.80	377.30	296.00	324.60
.....						
Profit per head.....	Dol.	126.00	58.20	38.70	100.00	25.40
.....						
Investment per head....	Dol.	250.00	(3/)	(3/)	(3/)	(3/)
.....						

1/ Charolais/Limousin (Choice) fed high-moisture corn with complete fortified supplement in atmosphere-controlled facility. 2/ Imputed value. 3/ Not available.

4/ Three percent of feed and calf cost. Reported death loss was only 1/2 of 1 percent on feed but loss, injury, poor gainers, etc. as a result of transport may have run higher. 5/ Purchase price less calf subsidy of \$27.



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